

Application Serial No.: 10/070,443  
Reply to Office Action dated January 25, 2005

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 16-18 and 20-28 are presently active in this case, Claim 16 having been amended by way of the present Amendment. Claims 1-15 and 19 have been canceled without prejudice or disclaimer.

Care has been taken such that no new matter has been entered by way of the present amendment. Support for the amendment of Claim 16 can be found in Claim 19 and on page 16, lines 29-31 of the present application. The Applicants respectfully submit that the amendments set forth herein do not raise new issues for consideration, and the amendments place the claims into better condition for appeal, and thus the Applicants respectfully request the entry of the amendments set forth herein.

In the outstanding Official Action, Claims 16-25 and 28 were rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11-317283. Claims 26 and 27 were rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11-317283 in view of Caddock (U.S. Patent No. 4,670,734). For the reasons discussed below, the Applicants traverse the obviousness rejections.

At the outset, the Applicants respectfully request a copy of any English language translation of JP 11-317283 upon which the Examiner is relying.

The basic requirements for establishing a *prima facie* case of obviousness as set forth in MPEP 2143 include (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, (2) there must be a reasonable

expectation of success, and (3) the reference (or references when combined) must teach or suggest all of the claim limitations. The Applicants submit that a *prima facie* case of obviousness has not been established in the present case because the JP 11-317283 reference does not teach or suggest all of the claim limitations recited in independent Claim 16 and there is no motivation to modify the reference to include the missing limitations.

Claim 16 of the present application recites a process for producing a ceramic heater, comprising forming a resistance heating element on a surface of a ceramic substrate by printing conductor containing paste on the surface of the ceramic substrate and firing, dividing the resistance heating element into plural sections; measuring a resistivity of each of the plural sections, and trimming the resistance heating element after firing so as to adjust the resistivity of each of the plural sections to a desired value. The Applicants submit that the JP 11-317283 reference does not disclose or suggest trimming the resistance heating element after firing, as recited in Claim 16 of the present application.

The JP 11-317283 reference depicts a ceramic heater having a heating element (4). The ceramic heater is obtained by applying a conductive paste on a green sheet to form resistance heating groups, cutting at least one of the wire heaters, laminating another green sheet on the heating pattern, and then sintering. According to the JP 11-317283 reference, the resistance value of each of the resistance heating groups is adjusted before sintering.

The present invention advantageously forms the resistance heating element on a surface of the ceramic substrate and trims the resistance heating element after firing thereof. Thus, the resistance value can be adjusted to a desired value with a high degree of accuracy. To the contrary, the JP 11-317283 reference provides an inaccurate process for producing a ceramic heating, since the resistance value of the wire heaters can change during sintering

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because the size of the green sheet and the wire heaters change. Moreover, since the wire heaters of the JP 11-317283 reference are embedded in the substrate, it is not possible to measure the resistance value or trim the wire heaters to adjust the resistance value after sintering.

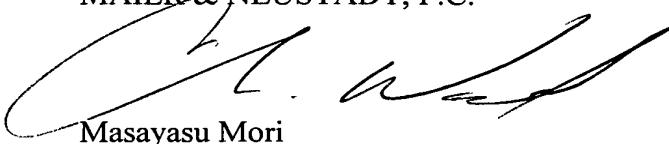
Thus, the Applicants respectfully submit that the JP 11-317283 clearly does not teach or suggest all of the limitations of the process of the present invention as recited in Claim 16. Accordingly, the present invention is not obvious in view of the JP 11-317283 reference.

Claims 17, 18, and 20-28 are considered allowable for the reasons advanced for Claim 16 from which they depend. These claims are further considered allowable as they recite other features of the invention that are neither disclosed nor suggested by the applied references when those features are considered within the context of Claim 16.

Consequently, in view of the above discussion, it is respectfully submitted that the present application is in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully Submitted,

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